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This article highlights research findings and practical applications shared with over 1,800 professionals, volunteers, and parents during a national cooperative extension satellite series focused on entertainment media violence. Participants increased their awareness and understanding of the potential negative effects of entertainment media violence, as well as identified and took specific steps to address the issue locally. Extension is positioned well through its vast network and technology to deliver high-quality, timely, and cost-effective professional development to community partners.

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Abstract

This article highlights research findings and practical applications shared with over 1,800 professionals, volunteers, and parents during a national cooperative extension satellite series focused on entertainment media violence. Participants increased their awareness and understanding of the potential negative effects of entertainment media violence, as well as identified and took specific steps to address the issue locally. Extension is positioned well through its vast network and technology to deliver high-quality, timely, and cost-effective professional development to community partners.

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- Every 11 seconds an American child is reported abused or neglected.
- Every 2 hours and 40 minutes an American child or teen is killed by gunfire.
- Every 8 minutes a child is arrested for violent crimes. (The State of Children in America's Union, 2002)

Do the above statistics present cause for alarm? Why are these acts occurring? What can Extension professionals, parents, and other adults do to lessen this violence?

This article highlights research findings related to entertainment media violence, the process used to develop and evaluate a national satellite series on this topic, and practical applications for Extension educators. The Impact of Entertainment Media Violence on Children and Families, a national satellite series produced in 2001 by Iowa State University Extension, is a form of scholarship that demonstrates land-grant universities' ability to be responsive to societal needs (Norman, 2001).

Violence in America: Whose Responsibility Is It?

Violence has historically played a role in entertainment. However, there's growing consensus that media violence has become more frequent, graphic, sexual, and sadistic <<http://www.media-awareness.ca/english/index.cfm>>. Parents blame network television, movie, and videogame producers, and they in return blame parents. Media producers say they produce what Americans say that they want, that they are practicing freedom of expression, that it is parents' responsibility to know what their children are viewing, and that the research on entertainment media violence has flaws.

Politicians have become more familiar with the research on this subject, are concerned about the potential negative effects, and are putting more regulations in place (McCain, 2000). However, regulations will only be meaningful if they are enforced--at the store and at home.

Violence in Entertainment Media: What Does the Research Say?

Violence in television programs and movies and its impact on children and families is not a new topic. Thirty years ago, Jesse Steinfeld, then Surgeon General of the United States, warned Americans about the negative effects of television violence on the emotions and behaviors of children, "It is clear to me that the causal relationship between [exposure to] televised violence and antisocial behavior is sufficient to warrant appropriate and immediate remedial action... there comes a time when the data are sufficient to justify action. That time has come" (Surgeon General's Scientific Advisory Committee, 1972).

Additionally, six major medical groups warn of harmful effects of media violence on children (Congressional Public Health Summit, 2000). Studies show there is a stronger relationship between viewing violence in television programs and movies and aggressive behavior, than there is between asbestos and cancer, and calcium intake and bone mass (Bushman, 2001).

Over 1,000 research studies in the past 50 years reveal there is a relationship between viewing violence in television programs and movies and aggressive behavior in children, youth, and adults. However, young children are most vulnerable to the effects of media violence because they:

- Are more easily impressionable,
- Have a harder time distinguishing between fantasy and reality,
- Cannot easily discern motives for violence, and
- Learn by observing and imitating. (Bushman, 2001)

Research has shown three major effects of viewing violence on television:

1. Children may become less sensitive to the pain and suffering of others.
2. Children may be more fearful of the world around them.
3. Children may be more likely to behave in aggressive or harmful ways toward others (American Psychological Association, 1985).

Criticisms of Research

Despite numerous studies conducted on this topic, critics claim that the research is flawed and that there are other societal forces (e.g., lack of parental involvement, poverty, teenage alienation, peer group) that have led to the increased violence in America. Criticisms include that many of the studies were lab experiments and cannot be generalized to the real world, the connection between media violence and violent behaviors in viewers has not been empirically established, and most behavior is multi-determined (Fischhoff, 1999).

Violent Television Programs

A typical American child spends an average of 28 hours a week (nearly 3 to 4 hours a day) exposed to television outside of school. When looking at total use of media, children between the ages of 8-18 spend more than 40 hours a week using some form of media (e.g., television, music, video games) (Roberts, Foehr, Rideout, & Brodie, 1999) outside the classroom and often as an individual effort. Time spent watching television programs and playing video games is time that children could use to read for pleasure, take a nature hike, play an

instrument, or interact with family members.

The National Television Violence Study (1996-98), through analyzing 8,000 hours of television and cable broadcasting, found that 60% of the programs on television were violent. Of this 60%, 4% did not show any anti-violent themes, and 40% of violent acts were perpetrated by the "good characters". When the violent acts were conducted by "bad characters," over 40% of the bad characters went unpunished. Seventy-three percent of the violence perpetrators did not show any remorse for their violent actions, and 55% of the victims did not show any pain or suffering due to violence inflicted on them. In addition, 40% of the violent acts were portrayed as humorous (Houston et al., 1992).

Children may be exposed to as many as 5 violent acts per hour during prime time and an average of 26 violent acts per hour during Saturday morning children's programs. Thus, an average American child will have seen about 8,000 murders and more than 100,000 other assorted acts of violence, by the time they graduate from elementary school (Houston et al., 1992).

Violent Video Games

Although television serves as the main source of media consumption for children, children are increasing their video game use. Approximately 10% of children ages 2-18 play video games over 1 hour each day (Roberts et al., 1999), and boys aged 8-13, on average, play video games over 7.5 hours each week (Roberts et al., 1999). In 2000, the revenues of video and computer games were as great as those of the retail software industry and significantly greater than that of the domestic film industry.

According to 4th grade girls, their favorite video games are violent ones (Buchman & Funk, 1996). Andersen and Dill (2000) found that use of violent video games was related to aggression and delinquency, and the time spent playing video games was negatively related to academic achievement. Sixty to 90% of the most popular video games portray violence. Andersen (2001) also found that playing a violent video game for as little as 20 minutes causes a decrease in prosocial, helping behaviors and an increase in the following:

- aggressive thinking
- aggressive feelings such as anger
- physiological arousal (e.g., heart rate) and
- aggressive behavior

How Do Children Learn to Become Aggressive?

Observational Learning

Observation, imitation, and trial and error are key strategies used by children to learn to speak language--and to learn violence. Adults have always been models for observation; however, the extent of role modeling provided by adults has changed with industrialization and technological advances. With the advent of television, movies, and video games, parents are only one source of role modeling.

Children spend many hours learning from television, movie, and video game characters. Combined, these media characters tap the audio, visual, and tactile modes of learning, thus making them very stimulating and appealing to young audiences. As a result, if caution is not taken, these media can minimize the presence of parents, teachers, and other adults in the community as role models. However, it is important to note that family attitudes and social class are stronger determinants of attitudes toward aggression than is the amount of exposure to TV. Therefore, parents have the opportunity to mitigate the potential negative effects of media violence (Huesmann, 2001).

Observational learning is stronger when the identification with the character is based more on wishful thinking than on similarity with the character (Huesmann, 2001). Examples of identification with non-similar characters are popular animated violent video games and television programs. There are a number of instances where children have imitated the violent acts they see in video games and television programs in real life in terms of shooting and other violent acts in school, neighborhood, and at home.

Repeated exposure over time strengthens the learning of observed violent acts. Besides observational learning, operant conditioning, a very important type for long-term learning, can play its part, especially in video games. In video games the child is an active learner as he or she makes things happen by choosing the response, targeting towards it, and finally making it happen. Moreover, this habituation becomes stronger as his or her

violent response, such as shooting the target, fighting, and hitting, is reinforced by earning additional points.

An Extension Response: "The Impact of Entertainment Media Violence on Children and Families," a National Satellite Series

Based on the growing research and societal concern regarding violence portrayed via entertainment media, Iowa State University Extension produced and broadcasted a four-part national satellite series (October 8, 22 and November 5, 19, 2001): "The Impact of Entertainment Media Violence on Children and Families," to 175 sites across the nation. The use of satellite technology allowed the program to be offered in several sites (rural and urban) across the nation simultaneously. As a result, a greater number of people participated in the program than if the program had been offered in only one site. In addition, travel costs were minimized for participants if the satellite program was offered in their community.

This satellite series brought together nationally recognized experts in the field of entertainment media violence to provide reliable information and practical suggestions to Extension and other family professionals. Approximately 1,800 professionals and parents were reached through this series.

The Logic Model--A Framework for Measuring Program Outcomes

To help describe what was done, how it was done, and the short-term outcomes that are associated with the satellite series, the logic model framework was implemented. The logic model describes the sequence of events that links program investments to results (University of Wisconsin Extension, 2002) and is the foundation of outcome-based evaluation. The purpose of the logic model is to clarify and make precise each element of the program and help identify the process and outcomes of the program. Graphically, the logic model illustrates the relationship of the parts to its whole and helps to summarize the program processes (inputs, activities, outputs) and program outcomes (Table 1).

Table 1.
Applying the Logic Model to the Satellite Program Series

Inputs	Activities
Team of extension field and campus staff convened to plan satellite series (7 people)	Identified: <ul style="list-style-type: none">• specific focus of the satellite series• potential sponsors and presenters• date/time to downlink the satellite series marketing plan
Family life extension state specialist	<ul style="list-style-type: none">• Reviewed existing literature• Secured presenters and sponsors• Promoted satellite series• Developed evaluation component
Free lance marketing specialist	<ul style="list-style-type: none">• Developed marketing materials (e.g., brochure, news releases)
ISU Extension Program Specialist	<ul style="list-style-type: none">• Developed and maintained Web site• Developed registration forms• Coordinated presenters' travel arrangements
ISU Extension campus-based office assistant	<ul style="list-style-type: none">• Received site registrations• Processed checks received for downlink fees

	and videotape orders
ISU Extension Video Producer	<ul style="list-style-type: none"> • Consulted with presenters regarding technical aspects of their presentation via satellite • Produced 4 programs in the satellite series • Edited videotaped copy of the series to produce a condensed videotaped version of the series
Program host, Iowa Public Television	<ul style="list-style-type: none"> • Hosted the satellite series • Facilitated questions and answers sessions with presenters
Presenters (4 people)	<ul style="list-style-type: none"> • Shared research and applications for practice • Typed up responses to questions not answered via the satellite program and posted responses on the Web site
Volunteers (4)	<ul style="list-style-type: none"> • Wrote down questions called in from various sites around the nation to give to program host for call-in session
Site facilitators	<ul style="list-style-type: none"> • Hosted program series at local downlink site • Promoted series locally
Graduate Student	<ul style="list-style-type: none"> • Compiled and assisted in analysis of evaluation data
Site registration fees and grants (\$30,000)	<ul style="list-style-type: none"> • Provided financial support to pay honorariums, presenters' travel expenses, uplink costs

Results

Outputs

- 175 Cooperative Extension county offices, hospitals, and schools downlinked the satellite series.
- Over 1,800 parents and professionals participated in one or more of the four programs in the series.
- 96 videotaped copies of the satellite series were distributed to individuals to share the information with parents and other professionals.
- Over 500 additional individuals (e.g., day care providers, teachers, foster parents, school counselors, parent educators, child abuse prevention council members, church groups, teen parents) participated in follow-up workshops conducted by county Extension staff using videotaped copies of the satellite series.
- Information from the series was used with elementary and middle school youth through after school computer labs using non-violent, educational videogames.

- 4H members produced their own media messages.
- Research findings and practical suggestions from the series have been shared with over 15,000 families via school, 4-H, and faith organization newsletters.
- Extension staff posted information from the series on Web sites (one Web site averaged over 30,000 hits a month).
- Over 5,100 visits and 2,200 downloads from the Web site were recorded in Feb 2004, more than two years after the broadcast of the satellite series.

Outcomes

The satellite series was evaluated to assess the extent of change in participants' and site facilitators' knowledge, attitudes, and behaviors related to potential negative effects of entertainment media violence for children and families.

Short-Term Outcomes

The percentages reported below are rounded up to the nearest percent and reflect individuals who completed the evaluation forms immediately following the satellite series.

Given that the response rate is low (25% for participants; 17% for facilitators), care needs to be taken in interpreting the findings so they are not generalized to the total number of individuals who participated in the satellite series. The low response rate could be due to the extensive length of the series (four programs over a 1-month period) and that there was no requirement for participants to complete the evaluation forms or for local site facilitators to return the evaluation forms to the originating institution.

- Estimates indicate that over 1,800 individuals participated in the series.
- The majority of the participants (n=438; 25% response rate) were educators and family/youth professionals (75%), parents (17%), health professionals (10%), administrators (7%), volunteers (4%), students (3%) and clergy (4%). (Note: participants reported more than one category.)
- The majority of participants who completed the evaluation form at the end of the series (n=438) indicated that entertainment media violence can lead to negative consequences in children (95% to a very large or large extent, 4% to some extent, 1% not at all).
- 96% of the participants reported that, if given the opportunity to decide, they would either eliminate all the violent media programs or eliminate only the extreme violent ones.
- When asked what steps they would take in the 1-2 weeks following the satellite series, participants indicated that they planned to limit the exposure of entertainment media violence to families (their own and those they work with) by providing information they learned in the series to adults and children, by showing videotaped copies of the series to parent and professional groups, and by writing letters to television stations informing them about the importance of this issue.
- Facilitators (n=29; 17% response rate) stated that the program content was relevant to the audience 79% (31% agreed, 48% strongly agreed); the styles of the presenters were conducive to learning 83% (55% agreed, 28% strongly agreed); and there was a balance between research reported and time given for questions and answers 83% (52% agreed, 31% strongly agreed).
- Aspects of the series the facilitators liked best were the clarity of the research, the practical examples shared about media literacy and the informational handouts they could use to further disseminate the information shared in the program.

Long-Term Outcomes

A follow-up evaluation was conducted in March 2002, 4 months following the last satellite broadcast (November 19, 2001) to assess the extent to which the information shared during the satellite programs was retained and/or resulted in action steps taken by participants. Participants and facilitators who shared their e-mail addresses on the attendance sheet at the end of the series were sent an e-mail message asking them to complete a follow-up

survey located at the Web site created for the series. When participants submitted their responses their e-mail addresses and names were not identified with their responses. The follow-up survey reported:

1. Attitudinal change regarding the effects of entertainment media violence in children before, immediately after and four months after the program;
2. Change in knowledge about the effects of entertainment media violence before, immediately after and four months after the program;
3. Action steps that participants actually took related to what they learned during the satellite series.

One hundred one participants responded to the electronic survey. A paired t-test was run to assess any significant change in attitude and knowledge before, immediately after, and 4 months after the program. The results indicated that the extent to which entertainment media violence affected children negatively was rated significantly higher ($p < .001$) by participants immediately after the program ($M = 2.881$, $SD = .355$) than before the program ($M = 2.535$, $SD = .558$). The extent to which entertainment media violence affected children negatively was rated significantly higher ($p < .001$) by participants in the 4-month follow-up survey ($M = 2.861$, $SD = .375$) than before the program ($M = 2.335$, $SD = .558$).

While the survey ratings immediately after the program were slightly higher than the 4-month follow-up responses, there was no significant difference between the ratings of these two surveys, indicating that in the 4 months between the end of the series and the follow-up survey the participants did not perceive any additional shift in attitude regarding the negative effects of entertainment media violence.

A majority of participants who responded to the e-mail survey indicated that they planned to continue the activities they identified they would do immediately following the series (listed above), as well as form local committees to address issues related to entertainment media violence and include information in agency and community newsletters.

Participants also stated that they need additional support to find funds to help develop educational programs about entertainment media violence (e.g., funds for staff time, resources, etc.) and brief fact sheets/handouts to disseminate to parents, volunteers, and professionals. A large number of participants expressed the seriousness they felt towards the issue of entertainment media violence after participating in the series. A majority of other responses indicated appreciation for the research shared, the media literacy content, the suggestions shared for parents and professionals working with children, and the information regarding various implications of entertainment media violence for different age groups of children.

Lessons Learned for Producing a National Satellites Series

Qualitative responses to the surveys (at end of the series and 4-months later) helped to inform the suggestions below for future satellite programs.

- Reduce the number of program sessions in a series from four sessions to two sessions and develop programs 1 ½ to 2 hours in length.
- Develop and post suggested local site activities on a Web site for site facilitators to conduct immediately before, during and after the program.
- Use few PowerPoint slides during presentations and increase the time devoted to presenters sharing their research and ideas in a conversational manner.
- Ask presenters how they best want to use the medium (satellite broadcast) and capitalize on presenters' presentation strengths.
- Recruit a broader audience to participate in the satellite series and serve as site facilitators through identifying state and national level agencies and organizations who have a vested interest in the program topic.
- Continue to partner with national organizations (e.g., Parent Teacher Association, American Academy of Pediatrics, AAFCS, NEAFCS, NCFR, etc.) to promote the satellite series on their Web sites and directly to audiences they serve.

- Continue to develop a Web site to promote the satellite series, to serve as a resource for local site facilitators (e.g., promotional materials, local site activities, technical information) and to link to additional research and educational tools related to the program topic.
- Develop a state-level registration fee that allows states to downlink the series in as many sites as they desire.

Recommendations for Extension Action

Role of Extension Professionals in Educating About Entertainment Media Violence

Extension has a history of assisting parents and other adult caregivers in understanding influences on child development, of speaking up for the needs of children and families, and of helping families and communities critically think about public issues affecting their lives. Mass media (e.g., newspaper articles, radio talk shows, cable television, Web sites) have long been major vehicles for Extension to share research and practical implications for families and professionals. Satellite broadcasts continue to serve as a cost-effective way to share this information, as well. This satellite series was one strategy to increase professionals' and parents' awareness and understanding of the issue, critically think about the issue, and begin to take action steps to address the impact of entertainment media violence on children and families.

Suggestions for Extension Professionals

- Increase personal awareness and understanding of this issue.
- Share information with parents, other adults and youth to help them develop critical thinking skills.
- Advocate. Share your viewpoints with movie, television, and game producers; help parents and youth learn how, when, and with whom to share their viewpoints; decide what products you are going to patronize.

Messages Extension Should Share with Families

- When it comes to entertainment media and young children, grown-ups are the gatekeepers.
- Make a list of the values you most want to pass along to your child and use that list to evaluate the media your child sees.
- Know what your child is watching and playing.
- If your child already has violent video games or movies, explain to him why they are harmful, get rid of them, offer to buy new, nonviolent movies and games, and give your child some choice in selecting nonviolent movies and games.
- Look at how your child uses media, and plan screen time to fit into a balanced routine of activities that include quiet and noise time; chances to have conversations, draw, and dance; and time to play alone and with others.
- If, after viewing TV or playing a video game, your child is aggressive, cranky, or scared, make different media choices.
- To see what your child might be most likely to remember, watch television programs or play videogames with the sound off. Images are more powerful than words--especially for young children.
- Look for developmentally appropriate production techniques (e.g., moderate pacing, showing instead of telling, highlighting key elements, age-appropriate language).
- Limit the number of media-related toys in your home and provide lots of generic toys. Children who only play with media-related toys may not be getting enough chances to use their imagination, especially if they use the toys only to repeat what they've seen rather than inventing their own stories.
- If you learn that a retailer is selling violent movies and games to children, complain to the manager.
- If you learn that a retailer is doing a good job of screening sales of violent material, thank the manager,

and support the business, perhaps by purchasing nonviolent movies or educational video games.

- Help educate others in your community (parents, youth, public officials). (Anderson, 2001; Rogow, 2001)

Additional Resources

Additional resources on entertainment media violence can be retrieved from
<<http://www.extension.iastate.edu/families/media/resources.html>>.

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